## CLAIMS

What is claimed is:

Claim 1. A method for diagnosing dementia in a mammal comprising:

obtaining a sample of body fluid from said mammal;

contacting said sample with at least one antibody which specifically binds to a marker indicative of thrombospondin ;

determining a presence of thrombospondin in said sample; and

correlating the presence of thrombospondin with the occurrence of dementia.

Claim 2. The method for diagnosing dementia in a mammal, in accordance with claim 1 wherein:

said dementia is Alzheimer's dementia.

Claim 3. A method as in claim 1, wherein said sample of body fluid is blood or any blood product.

Claim 4. A method as in claim 1, wherein said measuring of said sample is by an immunoassay technique.

Claim 5. A diagnostic kit for diagnosing and monitoring the progression of dementia comprising:

at least one antibody which is specific for a marker indicative of thrombospondin, said antibody or marker capable of being immobilized on a solid support;

and at least one labeled antibody, which binds to said marker;

whereby at least one analysis to determine a presence of a marker, an antibody specific thereto, or their immunologically detectable fragments, is carried out on a sample of a body fluid .

Claim 6. A kit as in claim 5 wherein said sample of body fluid is blood or a blood product.

Claim 7. A kit as in claim 5 wherein diagnosing and monitoring is carried out on a single sample of body fluid.

Claim 8. A kit as in claim 5 wherein diagnosing and monitoring is carried out on multiple samples of body fluid; such that at least one analysis is carried out on a first sample of body fluid and at least another analysis is carried out on a second sample of body fluid.

Claim 9. A method as in claim 8 wherein said first and second samples of body fluid are obtained at different time periods.

Claim 10. A process for the determination of dementia according to the principle of immunoassay, characterized in that a serum or plasma sample with at least one antibody against thrombospondin and a binding partner for thrombospondin or for the antibody is incubated, whereby either the antibody against thrombospondin or the binding partner is labeled with a determinable group, the thereby formed immunological complex which contains the determinable group is separated off and the determinable group in the separated off or still remaining phase is determined as measure for thrombospondin from the sample.

Claim 11. A process according to claim 10 characterized in that the sample with an antibody against thrombospondin and a conjugate from an antibody against thrombospondin and a determinable group is incubated, the formed immunological complex is separated by phase separation and the determinable group is determined in one of the phases.

Claim 12. A process according to 10 characterized in that the sample with an antibody against thrombospondin and a conjugate of thrombospondin and a determinable group is incubated, the formed immunological complex is separated off by phase separation and the determinable group is determined in one of the phases.

Claim 13. Use of antibodies against thrombospondin for the determination of dementia.

Claim 14. Use of autoantibodies against thrombospondin antibodies for the determination of dementia.